

CLAIMS

1. A digital information distribution control method in a system having a server performing a delivery service of digital information and an information processing terminal receiving the delivery service of the digital information,

5 wherein delivery data including the digital information and distribution control information representing a data transfer control condition is delivered from the server to the information processing terminal,

the delivery data is stored in the information processing
10 terminal, and

transfer of information including the delivery data is controlled between the information processing terminal and another information processing terminal depending on the distribution control information.

2. The distribution control method according to claim 1,

wherein in the transfer control, the information including the delivery data generated by using unique information of the information processing terminal is transferred and stored in the
5 other information processing terminal, and,

before the information including the delivery data stored in the other information processing terminal is re-stored in the information processing terminal, it is determined depending on the distribution control information whether re-storing in the
10 information processing terminal is possible or impossible.

3. The distribution control method according to claim 1,
wherein in the transfer control, the information including
the delivery data generated by using the unique information of the
information processing terminal is transferred and stored in the
5 other information processing terminal, and,
before the information including the delivery data stored in
the other information processing terminal is re-stored in the
information processing terminal, it is determined depending on the
distribution control information whether inquiry at the server is
10 possible or impossible.

4. The distribution control method according to claim 1,
wherein the distribution control information includes at least
one of a transfer possibility/impossibility determination condition
of the information including the delivery data and an inquiry
5 possibility/impossibility determination condition at the server.

5. A digital information distribution control method in a system
having a server for performing a delivery service of digital
information and an information processing terminal for receiving
the delivery service of the digital information,
5 wherein delivery data including the digital information and
distribution control information representing a data transfer control
condition is delivered from the server to the information processing

terminal,

the delivery data is stored in the information processing
10 terminal,

a first safing data including the delivery data is generated
by using terminal unique information allocated to the information
processing terminal and transferred to another information processing
terminal,

15 before delivery data included in safing data stored in the
other information processing terminal is re-stored in the information
processing terminal, a safing data transmission request is transmitted
to the other information processing terminal,

based on the terminal unique information of the information
20 processing terminal, and terminal unique information and distribution
control information included in second safing data corresponding
to the safing data transmission request, it is determined whether
the delivery data included in the second safing data can be re-stored
in the information processing terminal or not, and

25 the delivery data included in the second safing data is stored
in the information processing terminal when the delivery data can
be re-stored.

6. The distribution control method according to claim 5,

wherein the distribution control information designates at
least one of a transfer possibility/impossibility determination
condition of the safing information and an inquiry

5 possibility/impossibility determination condition at the server.

7. The distribution control method according to claim 6,
wherein when server inquiry is designated by the distribution
control information of the second safing data, safing data inquiry
including the second safing data and the safing data transmission
5 request is transmitted to the server.

8. The distribution control method according to claim 7,
wherein the server determines whether updating of the second
safing data included in the safing data inquiry is possible or
impossible when the safing data inquiry is received,
5 when the updating is possible, updated safing data obtained
by updating the second safing data by using server unique information
allocated to the server is generated, and the updated safing data
is returned as a response to the safing data inquiry, and
the information terminal receives the updated safing data as
10 second safing data corresponding to the safing data transmission
request.

9. The distribution control method according to claim 8,
wherein the updated safing data includes expiration-date
information,
the information processing terminal, based on the terminal unique
5 information of the information processing terminal, the terminal
unique information ,expiration-date information, and distribution
control information included in the second safing data, , determines

whether the delivery data can be re-stored in the information processing terminal or not.

10. The distribution control method according to claim 8,
wherein the information processing terminal further adds the request specifying information to the safing data transmission request to transmit the safing data transmission request and the request
5 specifying information to the other information processing terminal;
the server returns the updated safing data including the request specifying information, and
the information processing terminal, based on the terminal unique information of the information processing terminal, the
10 terminal unique information, request specifying information, and distribution control information included in the second safing data, , determines whether the delivery data can be re-stored in the information processing terminal or not.

11. The distribution control method according to claim 10,
wherein the request specifying information is a random number generated in the data transmission request.

12. The distribution control method according to claim 5,
wherein the distribution control information designates at least one of a possibility/impossibility condition of data transfer, a necessity/unnecessity condition of encryption in information
5 transfer, and an inquiry possibility/impossibility condition at the server.

13. The distribution control method according to claim 12,
wherein the terminal unique information includes at least the
identification information of a distribution signature creating
key, a distribution signature verifying key, a terminal certification,
5 an encrypting key, an encrypting key certification, a decrypting
key, and identification information.

14. The distribution control method according to claim 13,
wherein the information processing terminal
encrypts digital information included in the delivery data
by using the encrypting key included in the terminal unique information
5 when the distribution control information designates encryption
in data transfer,

generates the first safing data by using the delivery data
including the encrypted digital information to transfer the first
safing data to the other information processing terminal, and
10 decrypts the encrypted digital information of the delivery
data included in the second safing data by using the decrypting
key included in the terminal unique information.

15. A mobile information terminal which receives delivery of the
digital information from a server performing a delivery service
of the digital information and which can perform data transfer with
another information processing terminal for backup, comprising:
5 delivery data storing unit which receives and stores delivery
data including distribution control information representing a

condition to regulate data transfer and the digital information from the server;

terminal unique information storing unit which stores terminal
10 unique information allocated to the mobile information terminal;

safing data generating unit which generates the first safing data including the delivery data by using the terminal unique information to transfer the delivery data from the delivery data storing unit to the other information processing terminal, and which
15 transmits the first safing data to the other information processing terminal;

data transmission request generating unit which performs data transmission request to the other information processing terminal before the second safing data is received from the other information
20 processing terminal to re-store delivery data included in the second safing data in the delivery data storing unit; and

safing data verifying unit which verifies whether the second safing data can be re-stored or not by using the terminal unique information of the mobile information terminal ,and terminal unique
25 information and distribution control information included in the second safing data when the second safing data is received from the other information processing terminal as a response of the data transmission request, and which stores the delivery data included in the second safing data in the delivery data storing unit.

16. The mobile information terminal according to claim 15, further comprising

determining unit which determines whether transfer of the second

safing data to the delivery data storing unit is possible or impossible
5 by using the terminal unique information of the mobile information
terminal and , terminal unique information and distribution control
information included in the second safing data when the second safing
data is received from the other information processing terminal
as a response of the data transmission request, and
10 wherein when the second safing data can be transferred to the
delivery data storing unit, the safing data verifying unit verifies
whether the second safing data can be restored or not.

17. The mobile information terminal according to claim 16,
wherein the distribution control information designates at
least one of a possibility/impossibility condition of data transfer,
a possibility/impossibility condition of inquiry at the server.

18. The mobile information terminal according to claim 17,
wherein the determining unit transmits safing data inquiry
including the data transmission request and the second safing data
to the server when server inquiry is designated by the distribution
5 control information of the second safing data.

19. A server which performs a delivery service of digital information
to an information processing terminal, comprising:
server unique information storing unit which stores server
unique information allocated to the server;
5 delivery data management unit which generates delivery data
including the digital information and distribution control

information representing a data transfer control condition to deliver the delivery data to the information processing terminal; and

10 safing data updating unit, when safing data inquiry including terminal unique information of the information processing terminal and requested safing data is received, determines whether updating of the safing data included in the safing data inquiry is possible or impossible, and which updates the safing data when the updating is possible to return the updated safing data as a response of the
15 safing data inquiry.

20. An information processing apparatus which can be connected to a mobile information terminal receiving delivery data including distribution control information representing a condition to regulate data transfer and digital information from a server and which backs
5 up the delivery data received by the mobile information terminal, comprising:

 safing data storing unit which stores a first safing data including the delivery data generated by using terminal unique information allocated to the mobile information terminal; and
10 determining unit which receives safing data transmission request for re-storing the delivery data included in the first safing data stored in the safing data storing unit from the mobile information terminal and determines whether the stored first safing data is returned to the mobile information terminal as second safing data
15 based on the received data transmission request and terminal unique information and distribution control information of the first safing data stored in the safing data storing unit.

21. A distribution control system having at least a server performing a delivery service of digital information, a first information processing terminal receiving delivery of the digital information, and a second information processing terminal which can perform data transfer with the first information processing terminal,

wherein the server has at least delivery data management unit which generates delivery data obtained by adding distribution control information representing a condition to regulate data transfer to the digital information to transmit the delivery data to the first information processing terminal;

the first information processing terminal has at least delivery data storing unit which stores the delivery data,

terminal unique information storing unit which stores terminal unique information allocated to the first information processing terminal,

safing data generating unit which generates the first safing data including the delivery data by using the terminal unique information to transfer the delivery data from the delivery data storing unit to the second information processing terminal and ,transmits the first safing data to the second information processing terminal

data transmission request generating unit which receives second safing data from the second information processing terminal and performs data transmission request to the second information processing terminal to re-store the delivery data included in the

second safing data in the delivery data storing unit, and

safing data verifying unit which verifies whether the second safing data can be re-stored or not by using the terminal unique
 30 information when the second safing data is received from the second information processing terminal as a response of the data transmission request, and which stores delivery data included in the second safing data in the delivery data storing unit when the second safing data can be re-stored; and

35 the second information processing terminal has

at least safing data storing unit which stores the first safing data transmitted from the first information processing terminal, and

determining unit which determines, based on the data
 40 transmission request and terminal unique information and distribution control information of safing data stored in the safing data storing unit, whether the stored safing data is returned to the first information processing terminal as the second safing data or not.

22. A server program which causes a computer to realize a server function performing a delivery service of digital information to an information processing terminal, comprising:

the step of generating delivery data including the digital
 5 information and distribution control information representing a data transfer control condition to deliver the delivery data to the information processing terminal;

the step of, when safing data inquiry including terminal unique information of the information processing terminal and requested

10 safing data is received, determining whether updating of the safing
data included in the safing data inquiry is possible or impossible;
and
the step of updating the safing data when the updating is possible
to return the updated safing data as a response of the safing data
15 inquiry.

23. A program for a mobile information terminal which causes a
computer to receive delivery of the digital information from a server
performing a delivery service of digital information and to execute
data transfer with another information processing terminal for backup,
5 comprising:

the step of receiving delivery data including distribution
control information representing a condition to regulate data
transfer and the digital information from the server and storing
the delivery data;

10 the step of generating a first safing data including the delivery
data by using the terminal unique information to transfer the delivery
data to the other information processing terminal and transmitting
the first safing data to the other information processing terminal;

the step of performing data transmission request to the other
15 information processing terminal before second safing data is received
from the other information processing terminal to re-store delivery
data included in the second safing data in the delivery data storing
unit;

the step of, when the second safing data is received from the
20 other information processing terminal as a response of the data

transmission request, verifying whether the second safing data can be re-stored or not by using the terminal unique information of the mobile information terminal and terminal unique information and distribution control information included in the second safing data; and

the step of re-storing delivery data included in the second safing data when the second safing data can be re-stored.

24. The program for a mobile information terminal according to claim 23, further comprising:

the step of determining whether transfer of the second safing data to the delivery data storing unit is possible or impossible by using the terminal unique information of the mobile information terminal and terminal unique information and distribution control information included in the second safing data when the second safing data is received from the other information processing terminal as a response of the data transmission request, and

the step of verifying whether the second safing data can be re-stored or not by using the safing data verifying unit when the second safing data can be transferred to the delivery data storing unit.